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ABSTRACT

A pilot program of the industry immersion model of reading and mathematics instruction was conducted on site at the Airport Field Maintenance Facility, Memphis, in January-February 1989. After this intensive immersion program (80 hours of instruction in 4 weeks), the 12 participants showed significant gains averaging 2.2 grade levels in reading and 1.3 grade levels in mathematics, and positive growth in self-esteem. A follow-up study 6 months later showed that reading level gains were generally stable, with some dramatic gains among students who had continued to read on their own following the program and some losses of skill level among those who had not continued to read. All participants said they felt more self-assured, and all expressed interest in attending a continuing adult reading and mathematics program. Participants felt that they were able to use their skills better on the job as well as at home. Administrators also indicated that the program had been valuable in helping workers develop sensitivity to company needs and goals as well as basic skills. The follow-up study concluded that the immersion model is valuable because it customizes instruction to the needs and goals of workers and the company. (KC)

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A FOLLOWUP STUDY OF INDUSTRY IMMERSION FOR READING AND MATHEMATICS IMPROVEMENT AT AIRPORT FIELD MAINTENANCE FACILITY

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INTRODUCTION

A pilot program of the industry immersion model was conducted on site at the Airport Field Maintenance Facility, Memphis, during the months of January and February, 1989. This pilot used reading and mathematics as the content areas to be taught. The program resulted in average mean reading grade level and mathematics grade level scores of 2.2 and 1.3 years, respectively. These signficant gains were accomplished with eighty hours of instruction (40 in reading and 40 in mathematics) delivered in daily time frames of 4 hours.

Since the gain scores in reading were significantly high in the pilot, one must ask, "Were these real gain scores or simply artifacts created by a positive instructional climate and individual motivation?" To answer this question, a followup interview and a test of reading ability was conducted by the counsellor from the original instructional staff. This is a short description of that followup that occurred six months (August, 1989) after the initial instructional period.

FINDINGS FROM THE FOLLOWUP STUDY

READING

Reading grade level scores were reassessed during the followup using the same instrument that was used in the initial program. The scores from the San Diego Quick Assessment Test were generally stable from those obtained during the industry immersion program. Table 1 shows the scores and the extent to

Table 1

READING GRADE LEVEL
SCORES

individual	reading grade level		
	posttest	followup	gain/loss
1	4.3	4.1	-0.2
2	p	4.7	4.1
3	5.6	11.9	6.3*
4	6.2	11.9	5.7*
5	5.5	5.7	0.2
6	5.6	6.8	1.2
7	1.0	p3	-0.2
8	4.7	4.7	0.0
9	pp	p1	0.2
10	2.5	1.1	-1.4

*should be classified as "aliterate" (ability to read, but skills had atrophied with time)

which they changed over time.

Individual reading scores vary over time. Scores rose for those individuals who continued to read and to practice the skills learned or reinforced in the program; scores tended to atrophy for those who did not practice reading.

Two individuals, who made significant and dramatic gains over time, indicated that they had been reading more at home. These scores must be viewed with caution; they are probably individuals who must be classified as "aliterate", that is, they once knew how to read and did not use the skills, but whenever their interest was renewed and they began to read more then their reading scores increased dramatically.

PERSONAL FACTORS

The counsellor interviewed each participant during the followup study. The following are notable factors expressed by the participants:

1. The participants said that they felt more self assured. Individuals were very open and willing to talk about their deficiencies in reading and mathematics during the followup interview whereas they can to the initial interviews hesitant to talk and with a sense of concern.

2. Each participant expressed a willingness to begin a follow-on adult reading and mathematics program. Funding constraints within adult education programs in Tennessee do not allow ABE type programs to be offered during the summer months, basic programs are generally offered during a nine month,

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academic year period. Thus, the participants were anxious for the followup training to begin.

3. Every participant noted that he was able to use reading and mathematics better on the job as well as at home. Recognizing the need to read or calculate better is a major step forward that can lead to continued learning.

4. All participants thought that the industry immersion program was a benefit to them. Although many had not completed the short term goals which they set during the immersion program, they stated that the ability to stop, think, and set goals had helped them in every aspect of their lives.

5. Each participant said that he would recommend the concept to others and would participate in a similar type program to extend his knowledge and skills.

Administrative personnel from the Airport Field Maintenance Facility welcomed the counsellor warmly and "hoped that we'd come back." "There is a need for what you did." These comments are positive statements for the program by the supervisors of the participants.

CONCLUSIONS CONCERNING USE OF THE INDUSTRY IMMERSION MODEL

Administrators indicated that the model was valued because it

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conducted training in basic skills that developed sensitivity to Company needs and goals. Participants echoed this with comments such as "It helped me set goals for my job as well as at home."

The model is a valuable tool because it customizes Company goals with skill levels of participants. Instruction becomes workplace oriented, relevant, and timely.